United States Department of the Interior
FISH AND WILDLIFE SERVICE
Nevada Fish & Wildlife Office
1340 Financial Blvd., Suite 234

January 9, 2003
File No. 1-5-03-SP-046
File No. 1-5-03-SP-053

Ms. Wendy Broadhead
Tetra Tech EM Inc.
1325 Airmotive Way, Suite 200
Reno, Nevada 89502

Dear Ms. Broadhead:

Subject: Species List for Sierra Power Company's Proposed Tracy to Silver Lake 120kV Transmission Line Project, Washoe County, Nevada

This responds to your letter received on December 18, 2002, requesting a species list for Sierra Pacific Power Company's proposed Tracy to Silver Lake Transmission Project (Northern and Southern routes) in Washoe County, Nevada. We have enclosed lists of endangered, threatened, and candidate species which may be present within the vicinity of the proposed projects (Enclosure A and B). A species list was provided on July 31, 2002, for a previously proposed route for this project (File No. 1-5-02-SP-266). These lists fulfill the requirement of the Fish and Wildlife Service (Service) to provide information on listed species pursuant to section 7 (c) of the Endangered Species Act of 1973 as amended (Act), for projects that are authorized, funded, or carried out by a Federal agency. Enclosure C provides a discussion of the responsibilities Federal agencies have under section 7 of the Act and the conditions under which a biological assessment (BA) must be prepared by the lead Federal agency or its designated non-Federal representative. Lists of published references dealing with the distribution, life history, and habitat requirements of the listed species are also enclosed (Enclosure D). This information may be helpful in preparing a BA for the proposed project, if one is required, or other environmental documentation.

For your consideration, Enclosures A and B also contain lists of other species of concern to the Service that may occur in the Northern and Southern route project areas. The Service has used information from State and Federal agencies and private sources to assess the conservation needs and status of these species. Further biological research and field study are needed to resolve their conservation status. By considering these species and exploring management alternatives early in the planning process, it may be

possible to provide long-term conservation benefits for these species and avoid future conflicts that could otherwise develop. We recommend that you contact the Nevada Natural Heritage Program [1550 East College Parkway, Suite 145, Carson City, Nevada 89710, (775) 687-4245] and the appropriate regional office of the Nevada Division of Wildlife, as well as other local, State, and Federal agencies for data on distribution and conservation needs for these and other species of concern.

Because wetlands or streams are known to occur in the project vicinity, we ask that you be aware of potential impacts project activities may have on these areas. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (Corps) pursuant to section 404 of the Clean Water Act. We recommend you contact the Regulatory Section of the Corps' Reno Field Office [300 Booth Street, Room 2103, Reno, Nevada 89509, (775) 784-5304] regarding the possible need for a permit.

We also recommend that any land clearing or other surface disturbance associated with the proposed action within the project areas be timed to avoid potential destruction of active bird nests or young of birds that breed in the area. Such destruction may be in violation of the Migratory Bird Treaty Act (MBTA) (15 U.S.C. 701-718h). Under the MBTA, active nests (nests with eggs or young) of migratory birds may not be harmed, nor may migratory birds be killed. Therefore, we recommend land clearing be conducted outside the avian breeding season. If this is not feasible, we recommend a qualified biologist survey the areas prior to land clearing. If active nests are located, or if other evidence of nesting (mated pairs, territorial defense, carrying of nesting material, transporting food) is observed, a protective buffer (the size depending on the requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active.

Please reference File Nos. 1-5-03-SP-046 and 1-5-03-SP-053 in future correspondence concerning these species lists. If you have any questions or require additional information, please contact me or Marcy Haworth at (775) 861-6300.

Sincerely,

for Robert D. Williams
Field Supervisor

Enclosures

ENCLOSURE A

LISTED AND CANDIDATE SPECIES AND SPECIES OF CONCERN
THAT MAY OCCUR WITHIN THE VICINITY OF
THE TRACY TO SILVER LAKE TRANSMISSION LINE PROJECT
WASHOE COUNTY, NEVADA

NORTHERN ROUTE

File No. 1-5-03-SP-046; January 9, 2003

Endangered Species

Invertebrate

Carson wandering skipper	*Pseudocopaeodes eunus obscurus*

Threatened Species

Bird

Bald eagle	*Haliaeetus leucocephalus*

Candidate Species

Plant

Webber ivesia	*Ivesia webberi*

Species of Concern

Mammals

Pygmy rabbit	*Brachylagus idahoensis*
Pale Townsend's big-eared bat	*Corynorhinus townsendii pallescens*
Pacific Townsend's big-eared bat	*Corynorhinus townsendii townsendii*
Spotted bat	*Euderma maculatum*
Small-footed myotis	*Myotis ciliolabrum*
Long-eared myotis	*Myotis evotis*
Fringed myotis	*Myotis thysanodes*
Long-legged myotis	*Myotis volans*
Yuma myotis	*Myotis yumanensis*

Birds	
Western burrowing owl	*Athene cunicularia hypugea*
Sage grouse	*Centrocercus urophasianus*
Black tern	*Chlidonias niger*
Least bittern	*Ixobrychus exilis hesperis*
White-faced ibis	*Plegadis chihi*
Invertebrates	
Carson Valley wood nymph butterfly	*Cercyonis pegala carsonensis*
Peavine blue butterfly	*Euphilotes enoptes aridorum*
Nevada viceroy	*Limenitus archippus lahontani*
Plants	
Altered andesite buckwheat	*Eriogonum robustum*
Nevada oryctes	*Oryctes nevadensis*

ENCLOSURE B

LISTED AND CANDIDATE SPECIES AND SPECIES OF CONCERN
THAT MAY OCCUR WITHIN THE VICINITY OF
THE TRACY TO SILVER LAKE TRANSMISSION LINE PROJECT
WASHOE COUNTY, NEVADA

SOUTHERN ROUTE

File No. 1-5-03-SP-053; January 9, 2003

Threatened Species

Bird	
Bald eagle	*Haliaeetus leucocephalus*

Candidate Species

Plant	
Webber ivesia	*Ivesia webberi*

Species of Concern

Mammals	
Pygmy rabbit	*Brachylagus idahoensis*
Pale Townsend's big-eared bat	*Corynorhinus townsendii pallescens*
Pacific Townsend's big-eared bat	*Corynorhinus townsendii townsendii*
Spotted bat	*Euderma maculatum*
Small-footed myotis	*Myotis ciliolabrum*
Long-eared myotis	*Myotis evotis*
Fringed myotis	*Myotis thysanodes*
Long-legged myotis	*Myotis volans*
Yuma myotis	*Myotis yumanensis*
Birds	
Western burrowing owl	*Athene cunicularia hypugea*
Sage grouse	*Centrocercus urophasianus*
Black tern	*Chlidonias niger*
Least bittern	*Ixobrychus exilis hesperis*
White-faced ibis	*Plegadis chihi*

Invertebrates	
Carson Valley wood nymph butterfly	*Cercyonis pegala carsonensis*
Peavine blue butterfly	*Euphilotes enoptes aridorum*
Nevada viceroy	*Limenitus archippus lahontani*
Plants	
Altered andesite buckwheat	*Eriogonum robustum*
Nevada oryctes	*Oryctes nevadensis*

ENCLOSURE C

FEDERAL AGENCIES' RESPONSIBILITIES UNDER SECTIONS 7 (a) AND (c)
OF THE ENDANGERED SPECIES ACT

SECTION 7 (a): Consultation/Conference
Requires:

1) Federal agencies to utilize their authorities to carry out programs to conserve endangered and threatened species;

2) Consultation with the Fish and Wildlife Service (Service) when a Federal action may affect a listed endangered or threatened species to insure that any action authorized, funded or carried out by a Federal agency is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. The process is initiated by the Federal agency after determining the action may affect a listed species or critical habitat;

3) Conference with the Service when a Federal action is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat.

SECTION 7 (c): Biological Assessment - Major Construction Activity 1/
Requires Federal agencies or their designees to prepare a Biological Assessment (BA) for major construction activities. The BA analyzes the effects of the action on listed and proposed species. The process begins with a Federal agency requesting from the Service a list of proposed and listed threatened and endangered species. The BA should be completed within 180 days after its initiation (or within such a time period as is mutually agreeable). If the BA is not initiated within 90 days of receipt of the list, the accuracy of the species list should be informally verified with the Service. No irreversible commitment of resources is to be made during the BA process which would foreclose reasonable and prudent alternatives to protect endangered species. Planning, design, and administrative actions may proceed; however, no construction may begin.

We recommend the following for inclusion in the BA:

1. An onsite inspection of the area affected by the proposal which may include a detailed survey of the area to determine if the species or suitable habitat are present.

2. A review of literature and scientific data to determine species distribution, habitat needs, and other biological requirements.

3. Interviews with experts, including those within the Service, State conservation departments, universities, and others who may have data not yet published in scientific literature.

4. An analysis of the effects of the proposal on the species in terms of individuals and populations, including consideration of cumulative effects of the proposal on the species and its habitat.

5. An analysis of alternative actions considered.

6. Documentation of study results, including a discussion of study methods used, any problems encountered, and other relevant information.

7. Conclusion as to whether or not a listed or proposed species will be affected.

Upon completion, the BA should be forwarded to our office with a request for consultation, if required.

1/ A construction project (or other major undertaking having similar physical impacts) is a major Federal action significantly affecting the quality of the human environment as referred to in NEPA (42 U.S.C. 4332 (2) C).

ENCLOSURE D

BALD EAGLE, *HALIAEETUS LEUCOCEPHALUS*

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

NEVADA FISH AND WILDLIFE OFFICE
1340 FINANCIAL BOULEVARD, SUITE 234
RENO, NEVADA 89502-7147

July 31, 2002
File No. 1-5-02-SP-266

Ms. Wendy Broadhead
Tetra Tech EM Inc.
1325 Airmotive Way, Suite 200
Reno, Nevada 89502

Dear Ms. Broadhead:

This responds to your letter dated July 9, 2002, requesting a species list for Sierra Pacific Power Company's proposed 120kV transmission line from Silver Lake to Tracy, Nevada. We have enclosed a list of threatened and other species of concern that may be present within the vicinity of the proposed project (Enclosure A).

The proposed project occurs within a potential metapopulation for Lahontan cutthroat trout (LCT), and as such, the area may be necessary to recover LCT. The Truckee River Recovery Implementation Team (TRRIT) has been formed to facilitate the restoration and recovery of LCT populations throughout the Truckee River Basin. The TRRIT will be evaluating areas within the basin which could support LCT. Under the Endangered Species Act of 1973 (Act), as amended, completed projects should not preclude future recovery and survival of this species. We recommend that projects be reviewed for all direct and indirect impacts that they may have on riparian and aquatic habitats as they relate to LCT, and that consultation with the Service occur accordingly under section 7 of the Act.

For your consideration, Enclosure A also contains a list of other species of concern to the Service that may occur in the project area. The Service has used information from the State and other private interests to assess the conservation needs and status of these species. Further biological research and field study are needed to resolve their conservation status. One potential benefit of considering these other species of concern is that by exploring alternatives early in the planning process, it may be possible to provide long-term conservation benefits for these species and avoid future conflicts that could otherwise develop. We recommend that you contact the Nevada Natural Heritage Program [1550 East College Parkway, Suite 145, Carson City, Nevada 89710, (775) 687-4245] and the appropriate regional office of the Nevada Division of Wildlife as well as

other local, State, and Federal agencies for data on distribution and conservation needs for these and other species of concern.

Because wetlands, springs, or streams are known to occur in the project area, we ask that you be aware of potential impacts project activities may have on these areas. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (Corps) pursuant to section 404 of the Clean Water Act. We recommend that you contact the Regulatory Section of the Corps' Reno Field Office [300 Booth Street, Room 2103, Reno, Nevada 89509, (775) 784-5304] regarding the need for a permit.

We recommend land clearing (or other surface disturbance) be timed to avoid potential destruction of active bird nests or young of birds that breed in the area. Such destruction may be in violation of the Migratory Bird Treaty Act (MBTA) (15 U.S.C. 701-718h). Under the MBTA, active nests (nests with eggs or young) of migratory birds may not be harmed, nor may migratory birds be killed. Therefore, we recommend land clearing be conducted outside the avian breeding season. If this is not feasible, we recommend a qualified biologist survey the area prior to land clearing. If active nests are located, or if other evidence of nesting (mated pairs, territorial defense, carrying of nesting material, transporting food) is observed, a protective buffer (the size depending on the requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active. Clearing could take place, however, if no active nests are found.

Please reference File No. 1-5-02-SP-266 in future correspondence concerning this species list. If you have any questions, please contact me or Marcy Haworth at (775) 861-6300.

Sincerely,

for Robert D. Williams
Field Supervisor

Enclosures

Ms. Wendy Broadhead

File No. 1-5-02-SP-266

ENCLOSURE A

LISTED SPECIES AND SPECIES OF CONCERN
THAT MAY OCCUR WITHIN THE VICINITY OF THE PROPOSED
SILVER LAKE TO TRACY 120KV TRANSMISSION LINE,
WASHOE AND STOREY COUNTIES, NEVADA

File Number: 1-5-02-SP-266
July 31, 2002

Threatened Species

Bird	
Bald eagle	*Haliaeetus leucocephalus*
Fish	
Lahontan cutthroat trout	*Oncorhynchus clarki henshawi*

Species of Concern

Mammals	
Pygmy rabbit	*Brachylagus idahoensis*
Pale Townsend's big-eared bat	*Corynorhinus townsendii pallescens*
Pacific Townsend's big-eared bat	*Corynorhinus townsendii townsendii*
Spotted bat	*Euderma maculatum*
Small-footed myotis	*Myotis ciliolabrum*
Long-eared myotis	*Myotis evotis*
Fringed myotis	*Myotis thysanodes*
Long-legged myotis	*Myotis volans*
Yuma myotis	*Myotis yumanensis*
Birds	
Western burrowing owl	*Athene cunicularia hypugea*
Sage grouse	*Centrocercus urophasianus*
Black tern	*Chlidonias niger*
Least bittern	*Ixobrychus exilis hesperis*
White-faced ibis	*Plegadis chihi*
Reptile	
Northwestern pond turtle	*Clemmys marmorata marmorata*

Invertebrates	
California floater continued	*Anodonta californiensis*
Nevada viceroy	*Limenitus archippus lahontani*
Plants	
Altered andesite buckwheat	*Eriogonum robustum*
Webber's ivesia	*Ivesia webberi*
Nevada oryctes	*Oryctes nevadensis*

Nevada Natural Heritage Program

Department of Conservation and Natural Resources

1550 East College Parkway, Suite 145 * Carson City, Nevada 89706-7921
voice: (775) 687-4245 fax: (775) 687-1288 web: www.state.nv.us/nvnhp/

22 July 2002

Wendy Broadhead
Tetra Tech EMI
1325 Airmotive Way, Suite 200
Reno, NV 89502

RE: Data request received 15 July 2002

Dear Ms. Broadhead:

We are pleased to provide the information you requested on endangered, threatened, candidate, and/or sensitive plant and animal taxa recorded within or near the Sierra Pacific Power's proposed 120kv tract to Silver Lake project area. We searched our database and maps for the following:

Township	20N	Range	19E	Section	all
Township	20N	Range	21E	Section	all
Township	20N	Range	22E	Section	all
Township	21N	Range	18E	Section	all
Township	21N	Range	19E	Section	all
Township	21N	Range	20E	Section	all
Township	21N	Range	21E	Section	all

The enclosed printout lists the taxa recorded within the given area. Please be aware that habitat may be available for the Lahontan cutthroat trout, *Oncorhynchus clarki henshawi*, a Federally Threatened Taxon; Margaret's rushy milkvetch, *Astragalus convallarius* var. *margaretiae*, a Nevada Natural Heritage Program (NNHP) Sensitive Species; Ames milkvetch, *Astragalus pulsiferae* var. *pulsiferae*, a California Bureau of Land Management (BLM) Special Status Species; the Sierra Valley mousetails, *Ivesia aperta* var. *aperta*, a Nevada and California BLM Special Status Species; the Mono checkerspot, *Euphydryas editha monoensis*, a Nevada BLM Sensitive Species; Townsend's big-eared bat, *Corynorhinus townsendii*, a Nevada BLM Sensitive Species; the western small-footed myotis, *Myotis ciliolabrum*, a Nevada BLM Sensitive Species; the silver-haired bat, *Lasiurus cinereus*, a NNHP Sensitive Species; the big brown bat, *Eptesicus fuscus*, a NNHP Sensitive Species; the Mexican free-tailed bat, *Tadarida brasiliensis*, a NNHP Sensitive Species; and the spotted bat, *Euderma maculatum*, a Nevada BLM Special Status Species also protected under Nevada state law (NAC 503.030) as Threatened. We do not have complete data on various raptors that may also occur in the area; for more information contact Ralph Phenix, Nevada Division of Wildlife at (775) 688-1565. Note that all cacti, yuccas, and Christmas trees are protected by Nevada state law (NRS 527.060-.120), including taxa not tracked by this office.

Please note that our data are dependent on the research and observations of many individuals and organizations, and in most cases are not the result of comprehensive or site-specific field surveys. Natural Heritage reports should never be regarded as final statements on the taxa or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

Thank you for checking with our program. Please contact us for additional information or further assistance.

Sincerely,

Jennifer Newmark
Program Biologist

Sensitive Taxa Recorded Near the Proposed 120kv Track to Silver Lake Project Area

Compiled by the Nevada Natural Heritage Program for Tetra Tech EMI

22 July 2002

Scientific name	Common name	Usfws	Blm	Usfs	State	Grank	Townrange	Section	Lat	Long	Prec	Last
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	24,25	39.576333	-119.805000	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	24	39.582500	-119.792500	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	22	39.583333	-119.832778	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	24	39.591111	-119.800278	S	1994-06-10
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	21	39.587222	-119.851944	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	31	39.555278	-119.889722	S	1994-06-10
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	29	39.573333	-119.885278	S	1995-06-09
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	21	39.586869	-119.880278	S	1996-05-01
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	21	39.586111	-119.845278	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	24	39.579722	-119.801667	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	31	39.553611	-119.886944	S	1994-06-10
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	25	39.576389	-119.804167	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	29-31	39.563889	-119.883056	S	1995-06-09
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	22	39.583056	-119.839722	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	30,31	39.563056	-119.889444	S	1994-06-10
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	25,26	39.569722	-119.805833	S	1997-04-16
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	30	39.568611	-119.882500	S	1995-06-09
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	26	39.576389	-119.857500	S	1996-05-01
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	24	39.585000	-119.791944	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	25	39.575556	-119.800556	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	25	39.577500	-119.795556	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	29	39.566111	-119.876944	S	1995-06-09
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	31	39.556389	-119.883889	S	1994-06-10
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	30	39.564444	-119.892222	S	1994-06-10
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	29	39.572222	-119.866667	S	1995-06-09
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	21	39.584167	-119.846667	S	1997-06-16
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	13,24	39.591944	-119.803611	S	1994-06-10
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	30,31	39.563333	-119.886111	S	1994-06-10
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	26	39.570833	-119.858889	S	1995-06-09
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	24	39.589167	-119.795833	S	1994-06-10
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	25	39.576944	-119.792778	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	26	39.574167	-119.858333	S	1995-06-09
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	23	39.578889	-119.812222	S	1997-04-16
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	32	39.561944	-119.879444	S	1995-06-09

Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	22	39.582222	-119.836111	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	22	39.582500	-119.841667	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	24	39.581111	-119.798333	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	28,29	39.573056	-119.861944	S	1995-06-09
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	24	39.590000	-119.791667	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	21	39.581944	-119.847778	S	1997-06-16
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	25	39.570000	-119.802778	S	1994-06-03
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	29	39.570833	-119.867222	S	1995-06-09
Eriogonum robustum	altered andesite buckwheat		N			G2G3	020N019E	31	39.554722	-119.886111	S	1994-06-10
Euphilotes enoptes aridorum	Peavine blue					G5T1	020N019E	7	39.619444	-119.890833	S	1981-08-07
Ivesia webberi	Webber ivesia	C	S,C	S,C	CE#	G2	020N019E	17	39.593333	-119.869722	S	2000-09-19
Ivesia webberi	Webber ivesia	C	S,C	S,C	CE#	G2	020N019E	21,22	39.583889	-119.844444	S	1997-06-16
Mimulus ovatus	Steamboat monkeyflower					G1G2Q	020N019E	31	39.553611	-119.886944	G	1984-PRE
Plagiobothrys glomeratus	altered andesite popcornflower					G2G3	020N019E	24	39.579722	-119.801667	S	1998-06-21
Plagiobothrys glomeratus	altered andesite popcornflower					G2G3	020N019E	24	39.589722	-119.795556	M	1999-PRE
Strix occidentalis occidentalis	California Spotted Owl	<C2		S,I,L	YES	G3T3	021N018E	16,21	39.679167	-119.967500	M	1983-12-12

U. S. Fish and Wildlife Service (Usfws) Categories for Listing under the Endangered Species Act:

- C — Candidate
- <C2 — Former Category 2 Candidate, now species of concern

Bureau of Land Management (Blm) Species Classification:

- S — Nevada Special Status Species - USFWS listed, proposed or candidate for listing, or protected by Nevada state law
- N — Nevada Special Status Species - designated Sensitive by State Office
- C — California Special Status Species (see definition S and N)

United States Forest Service (Usfs) Species Classification:

- S — Region 4 (Humboldt-Toiyabe NF) sensitive species
- I — Region 5 (Inyo NF) sensitive species
- L — Region 5 (Lake Tahoe Basin Management Unit) sensitive species
- C — Region 5 sensitive species, not yet known from Inyo NF or LTBMU

Nevada State Protected (State) Species Classification:

Fauna:
- YES — Species protected under NRS 501.

Flora:
- CE — Critically endangered - species whose survival requires assistance because of overexploitation, disease or other factors, or because their habitat is threatened with destruction, drastic modification or severe curtailment (NRS 527.260-.300)
- CE# — Recommended for listing as critically endangered
- CY — Protected as a cactus, yucca, or Christmas tree (NRS 527.060-.120)

Precision (Prec) of Mapped Occurrence:

Precision, or radius of uncertainty around latitude/longitude coordinates:
- S — Seconds: within a three-second radius
- M — Minutes: within a one-minute radius, approximately 2 km or 1.5 miles
- G — General: within about 8 km or 5 miles, or to map quadrangle or place name

Nevada Natural Heritage Program Global (Grank) and State (Srank) Ranks for Threats and/or Vulnerability:

- G — Global rank indicator, based on worldwide distribution at the species level
- T — Global trinomial rank indicator, based on worldwide distribution at the infraspecific level
- S — State rank indicator, based on distribution within Nevada at the lowest taxonomic level
  - 1 — Critically imperiled and especially vulnerable to extinction or extirpation due to extreme rarity, imminent threats, or other factors
  - 2 — Imperiled due to rarity or other demonstrable factors
  - 3 — Vulnerable to decline because rare and local throughout its range, or with very restricted range
  - 4 — Long-term concern, though now apparently secure; usually rare in parts of its range, especially at its periphery
  - 5 — Demonstrably secure, widespread, and abundant
    - A — Accidental within Nevada
    - B — Breeding status within Nevada (excludes resident taxa)
    - H — Historical; could be rediscovered
    - N — Non-breeding status within Nevada (excludes resident taxa)
    - Q — Taxonomic status uncertain
    - U — Unrankable
    - Z — Enduring occurrences cannot be defined (usually given to migrant or accidental birds)
    - ? — Assigned rank uncertain

Astragalus convallarius E. Greene var. *margaretiae* Barneby (1984)

MARGARET RUSHY MILKVETCH

FAMILY: *Fabaceae*, the legume family.

STATUS: Heritage Program SENSITIVE LIST, ranks: G5 T2 S2
USFWS/ESA: none. STATE OF NEVADA: none. BLM: none. USFS: none. NNNPS: none.

POPULATION CENSUS: 8 occurrences mapped; total estimated individuals unknown, total estimated area unknown. **TREND:** unknown.

IMPACTS AND MAJOR THREATS: No summary available (see references).

INVENTORY EFFORT: Not yet systematically surveyed. Most recent entered survey 1989, average year of last survey 1983. Years since last entered survey (percent of mapped records at various survey ages): 11-20 yrs: 87.5%; 21-30 yrs: 12.5%.

LAND MANAGEMENT: U. S. Bureau of Land Manageme nt.

RANGE: Carson City, Douglas, Lyon, and Storey counties, Nevada. Apparently endemic to the Pine Nut and Virginia ranges. Maximum range dimension 48.2 km (30.0 mi) excluding most disjunct record. Type specimen collected in Lyon County.

ELEVATIONS RECORDED: 4700-7800 feet (1433-2377 meters).

HABITAT: Rocky slopes and flats among sagebrush in the pinyon-juniper and sagebrush zones.

PHENOLOGY: flowering late-spring. Range of most frequent survey months: May-June.

LIFE-FORM AND HABIT: perennial herb from a buried root crown.

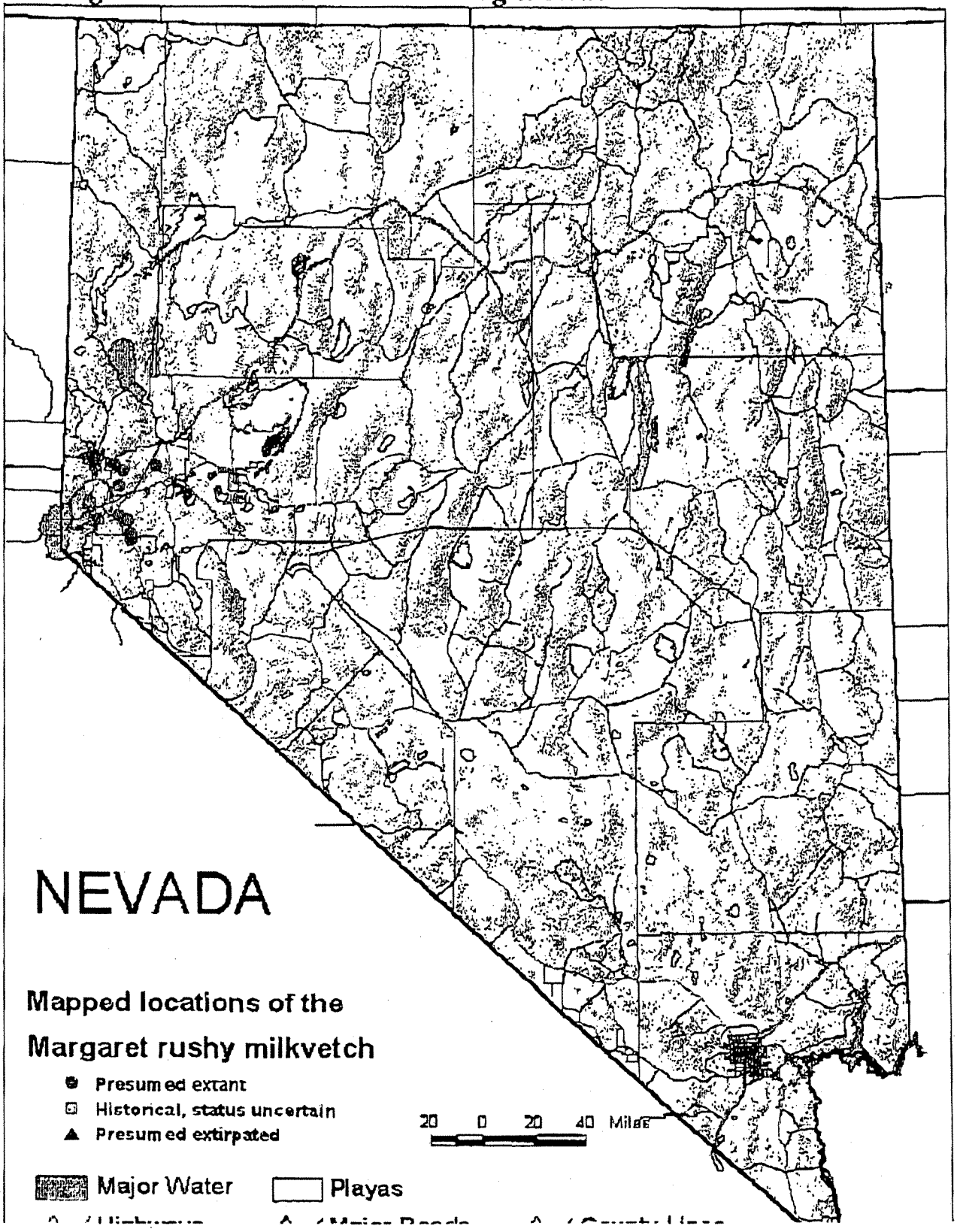
DESCRIPTION: not available (see references).

PHOTOGRAPHS: none known.
ILLUSTRATIONS: Barneby (1989).
SPECIFIC REFERENCES:

Barneby, R. C. 1984. Dragma hippomanicum X: Astragali (Leguminosae) nevadenses novi criticive, singulo peruviano adjecto. Brittonia 36: 167-173.

Nevada Natural Heritage Program NEVADA RARE PLANT ATLAS map printed 26 June 2001

Astragalus convallarius var. margaretiae




Highways
Major Roads
County Lines

NEVADA NATURAL HERITAGE PROGRAM **RARE PLANT FACT SHEET** Compiled 25 June 2001

Astragalus pulsiferae A. Gray var. *pulsiferae* — PULSIFER MILKVETCH

FAMILY: *Fabaceae*, the legume family.

STATUS: **Heritage Program SENSITIVE LIST, ranks: G4 T2 S1**
USFWS/ESA: none. **STATE OF NEVADA:** none. **BLM:** Special Status Species in California. **USFS:** Region 5 (California) Sensitive Species. **NNNPS:** watch list.

POPULATION CENSUS (NEVADA): 4 occurrences mapped; total estimated individuals unknown, total estimated area unknown. **TREND:** unknown.

IMPACTS AND MAJOR THREATS (NEVADA): No summary available (see references).

INVENTORY EFFORT (NEVADA): Not yet systematically surveyed in Nevada. Most recent entered survey 1980, average year of last survey 1959. **Years since last entered survey** (percent of mapped records at various survey ages): 21-30 yrs: 75%; 51+ yrs or unknown: 25%.

LAND MANAGEMENT (NEVADA) in decreasing predominance: private lands, U. S. Bureau of Land Management (?).

RANGE: Washoe County, Nevada; also in CA. Maximum Nevada **range dimension** 17.5 km (10.8 mi) excluding most disjunct record.

ELEVATIONS RECORDED (NEVADA): 4625-5200 feet (1410-1585 meters).

HABITAT: no summary available (see references).

PHENOLOGY: flowering late-spring. Range of most frequent survey months: May-June.

LIFE-FORM AND HABIT: perennial herb from a buried root crown.

DESCRIPTION: not available (see references).

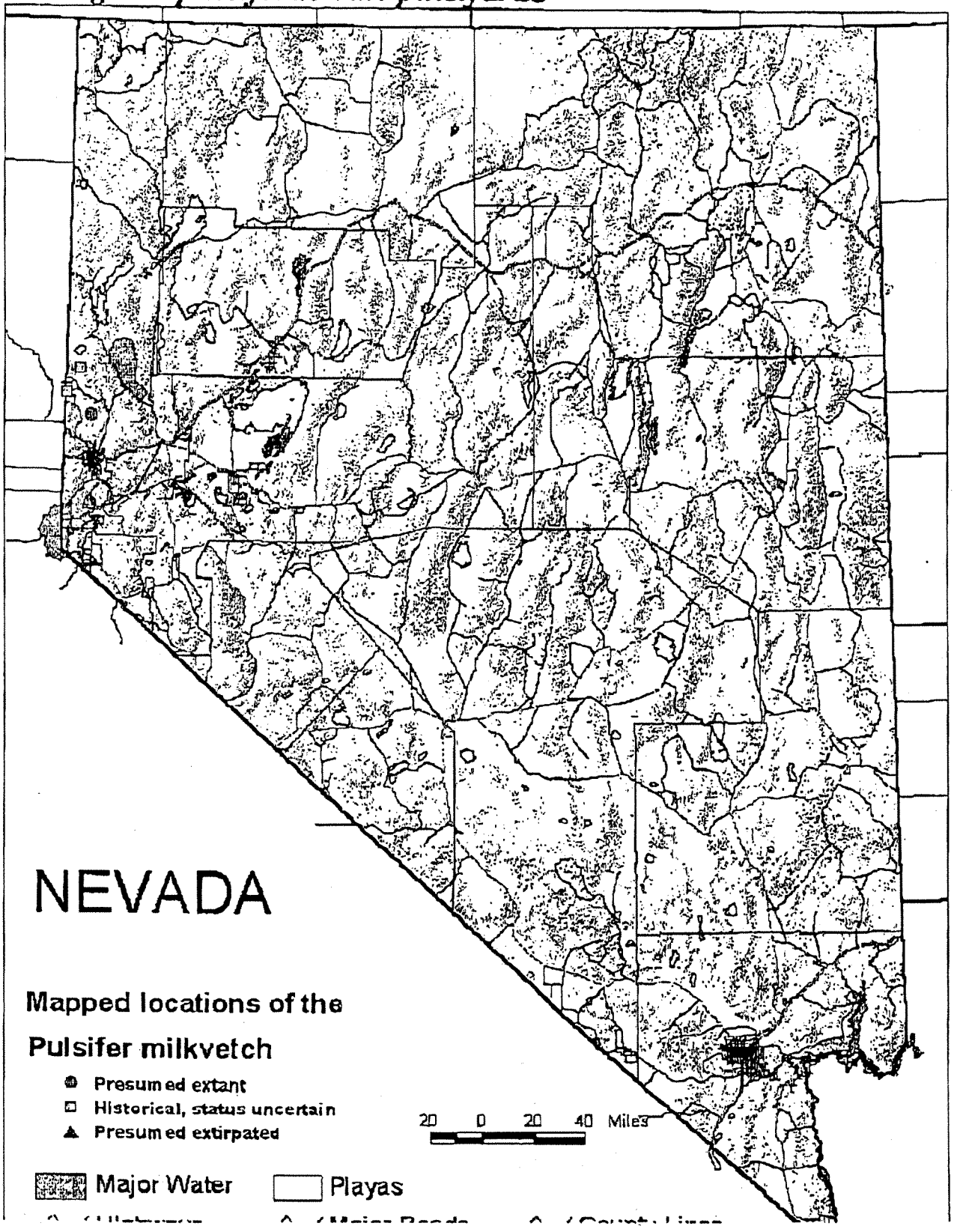
PHOTOGRAPHS: Nevada Natural Heritage Program images web page (1998-present) and files.
ILLUSTRATIONS: Barneby (1989).
OTHER GENERAL REFERENCES (listed separately): Barneby (1964), Hickman (1993).

Nevada Natural Heritage Program

NEVADA RARE PLANT ATLAS

map printed 25 June 2001

Astragalus pulsiferae var. pulsiferae



Highways Major Roads County Lines

Ivesia aperta (J. T. Howell) Munz var. *aperta* — SIERRA VALLEY IVESIA

FAMILY: *Rosaceae*, the rose family. **SYNONYMS:** *Potentilla aperta*

STATUS: **Heritage Program SENSITIVE LIST, ranks: G2 T2 S1**
USFWS/ESA: species of concern. **STATE OF NEVADA:** none. **BLM:** Special Status Species in Nevada and California. **USFS:** Humboldt-Toiyabe NF and Region 5 (California) Sensitive Species. **NNNPS:** THREATENED.

POPULATION CENSUS (NEVADA): 6 occurrences mapped at 1.0 km (0.6 mi) separation, OR 7 occurrences mapped at 0.16 km (0.1 mi) separation; total estimated individuals 2,600,000+, total estimated area 4.5+ ha (11.1+ ac). TREND: DECLINING.

IMPACTS AND MAJOR THREATS (NEVADA): Impacted somewhat by road development and maintenance and off-road vehicle use, vulnerable to fire suppression activities, drying of habitat by water diversions, and invasive weed colonization.

INVENTORY EFFORT (NEVADA): Survey mostly complete. Most recent entered survey 2000, average year of last survey 1974. **Years since last entered survey** (percent of mapped records at various survey ages): **0-5 yrs:** 71.4%; **51+ yrs or unknown:** 28.6%.

LAND MANAGEMENT (NEVADA) in decreasing predominance: Humboldt-Toiyabe National Forest, private lands, U. S. Bureau of Land Management (?).

RANGE: Storey and Washoe counties, Nevada; also in CA. Known in Nevada from the Carson and Virginia ranges and Peavine Mountain. Maximum Nevada **range dimension 35.6 km (22.1 mi)** excluding most disjunct record. **Type specimen** collected in Plumas County, California.

ELEVATIONS RECORDED (NEVADA): 6460-7300 feet (1969-2225 meters).

HABITAT (NEVADA): Shallow, vernally saturated, slowly draining, sandy to rocky clay soils derived from mostly andesitic volcanic rock or alluvium on benches and flats in meadows, seeps, intermittent drainages, etc., in the yellow-pine, mountain sagebrush, and mountain mahogany zones. Dependent on wetland margin areas in Nevada.

PHENOLOGY: flowering late-spring to summer, from late May through mid-August. Range of most frequent **survey months:** June-August.

LIFE-FORM AND HABIT: perennial herb.

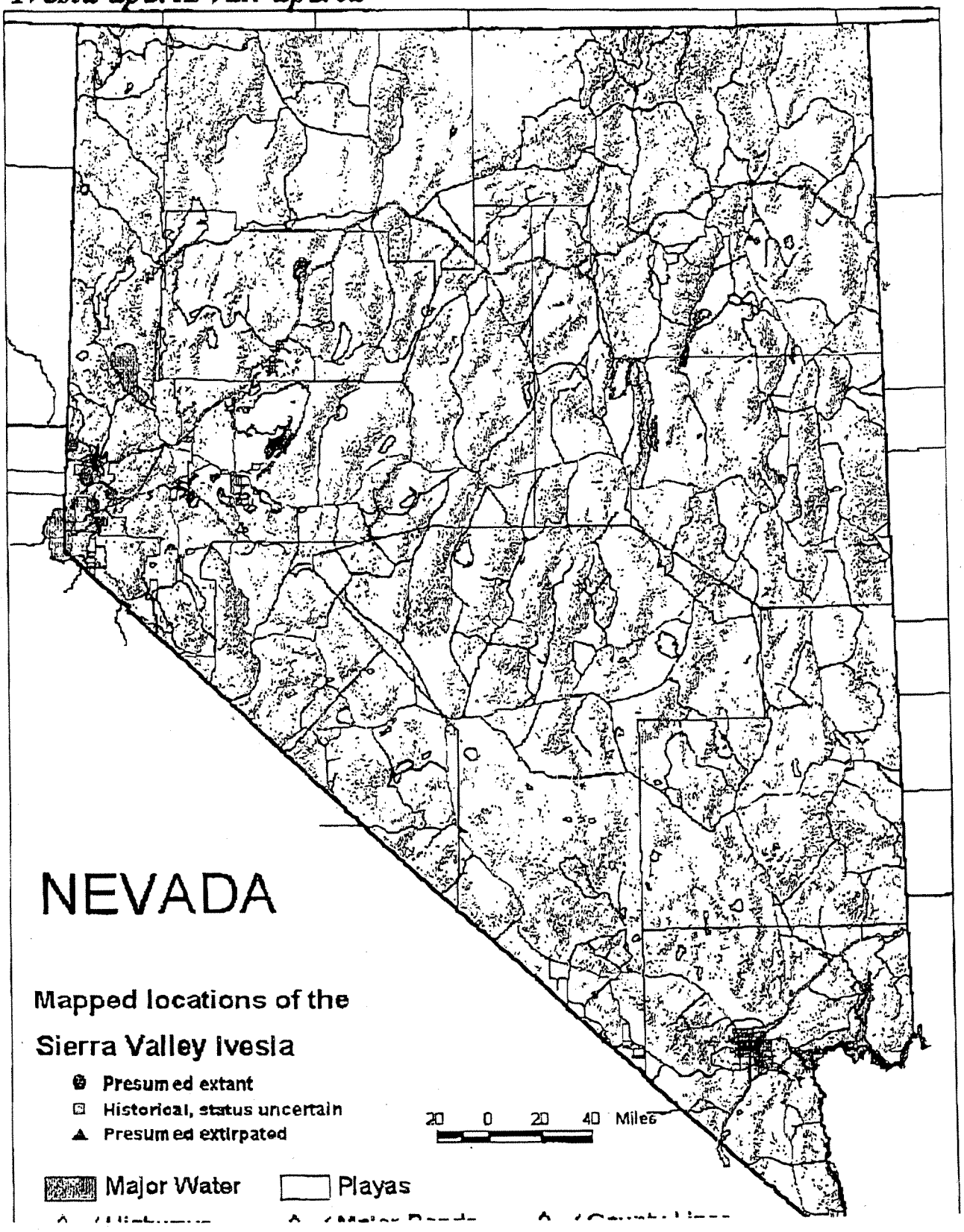
DESCRIPTION: not available (see references).

PHOTOGRAPHS: Witham (2000); Nevada Natural Heritage Program images web page (1998-present) and files.
ILLUSTRATIONS: Cronquist et al. (1997).
OTHER GENERAL REFERENCES (listed separately): Hickman (1993).
SPECIFIC REFERENCES:

Ertter, B. 1988. Ivesia aperta var. canina (Rosaceae), new from California. Brittonia 40: 398-399.
Ertter, B. 1989. Revisionary studies in Ivesia (Rosaceae: Potentilleae). Systematic Botany 14: 231-244.
Witham, C. W. 2000. Current knowledge and conservation status of Ivesia aperta (J. T. Howell) Munz var. aperta (Rosaceae), the Sierra Valley ivesia, in Nevada. Carson City: Nevada Natural Heritage Program, status report prepared for the U. S. Fish and Wildlife Service, Reno, Nevada.

Nevada Natural Heritage Program NEVADA RARE PLANT ATLAS map printed 25 June 2001

Ivesia aperta var. aperta



Highways Major Roads County Lines